



# HF Happenings 857

Volume 19, Issue 14, the week of 22 July 2019

You can now download your copy of HF Happenings from [www.sarl.org.za/hf\\_happenings.asp](http://www.sarl.org.za/hf_happenings.asp)

Southern African Fauna and Flora <https://zsfaunaandflora.wordpress.com/>

ZS SOTA <https://zssota.wordpress.com>

Zone 38 Award and others <https://zone38award.wordpress.com/>

Worldwide List of HF Beacons <https://iaruhfbeacons.wordpress.com/>

5 MHz (60 metre) allocations <http://www.sarl.org.za/public/contests/contestrules.asp>



The **All Africa Award** is sponsored by the South African Radio League. Its aim is to encourage more QSOs with African countries. Applicants must prove having contacted the following 31 areas - One contact with a station in each of the six call areas of South Africa (ZS1 to ZS6) and one contact in each of 25 African countries outside South Africa.

Only contacts with stations on the African continent are valid. Islands and ship-based stations do not count. "Country" means an entity included in the DXCC entities list maintained by the ARRL. Deleted countries also count, if contacts were made while the country existed. ZS3 stations in South West Africa (before 1990) count as Namibia.

<http://www.sarl.org.za/public/awards/awards.asp>

## July

21 to 23 - Winter Wonderland Festival, Gordon's Bay

25 - **Closing date for August Radio ZS**

26 and 27 - Franschoek Mystery Weekend

26 to 28 - Winter Celebration, Hogsback

27 and 28 - **RSGB Islands on the Air (IOTA) contest**

29 - **Closing date for RaDAR, QRP and ZS2 Sprint logs**

28 to 30 - Winter Wonderland Festival, Gordon's Bay

## August

3 - **Pretoria ARC Flea Market**

4 - **SARL HF Phone Contest**

9 - National Women's Day; **SARL YL Sprint**

9 to 11 - Ride the Red Devil @ the Robertson Slow Food and Wine Festival

10 - **SARL Youth Sprint**

10 and 11 - **WAE DX RTTY Contest**; Namaqua Daisy Challenge, Vredendal

11 to 17 - **YOTA 2019, Sofia Bulgaria**

12 - International Youth Day; **closing date HF Phone logs**

16 - **closing date YL logs**

17 and 18 - **International Lighthouse and Lightship Weekend**

18 - **SARL HF Digital Contest**

19 - World Humanitarian Day

20 - **Highway ARC meeting**

23 - **closing date for September Radio ZS**

23 to 1 Sept - The Clanwilliam Wild Flower Festival

25 - **SARL HF CW Contest**

29 to 31 - Williston Winter Festival

30 and 31 - Hantam Vleisfees, Calvinia

## The Results of the SARL Newbie Contest

The Contest Committee received 9 logs for the SARL Newbie Contest held on Saturday 6 July 2019.

- 1<sup>st</sup> Brad Mostert, ZS6WWW - 210 points
- 2<sup>nd</sup> Mare Grobbelaar ZS4MG - 135 points
- 3<sup>rd</sup> Nickus de Vos, ZR6JN - 130 points
- 4<sup>th</sup> Casper du Plessis ZS6CDP - 105 points
- 5<sup>th</sup> Charmaine Schutte, - ZS5CVH - 88 points
- 6<sup>th</sup> Breanne Schutte, ZS5BZ - 85 points
- 7<sup>th</sup> Albert Schreuder, ZS6SE - 72 points
- 8<sup>th</sup> Christiaan Baard, ZS3CRB - 28 points
- 9<sup>th</sup> Roy Walsh, ZS3RW - 19 points

(Number 5 and 6 – mother and daughter!)

## The Results of the 3<sup>rd</sup> SARL Wednesday 80 m Club Sprint

The Contest Committee received 48 logs for the third SARL Wednesday 80 m Club Sprint held on Wednesday 17 July 2019. From the 48 logs it was determined that 532 QSOs were made (March – 44 logs and 722 QSOs; May – 38 logs and 296 QSOs).

A number of the logs were submitted as “2019 SARL 80 m Club Sprint.xlsx” instead of “my call sign 2019 SARL 80 m Club Sprint.xlsx” e.g. “ZS9HQ 2019 SARL 80 m Club Sprint.xlsx.” Are you guilty? Have a look at the log you submitted to [zs4bfm@mweb.co.za](mailto:zs4bfm@mweb.co.za)!

- 1<sup>st</sup> the Bo-Karoo ARC – 668 points (14 logs)
- 2<sup>nd</sup> the West Rand ARC – 559 points (13 logs)
- 3<sup>rd</sup> the Boland ARC – 459 points (15 logs)
- 4<sup>th</sup> the Hibiscus Coast ARC – 150 points (3 logs)
- 5<sup>th</sup> the Bloemfontein ARC – 99 points (2 logs)
- 6<sup>th</sup> the Cape Town ARC – 44 points (1 log)

And who participated?

- 1<sup>st</sup> Schalk, ZS1LL – 99 points (Bo-Karoo)
- 2<sup>nd</sup> Syd, ZS5AYC – 98 points (Hibiscus)
- 3<sup>rd</sup> Jan, ZS4JAN – 92 points (Bloemfontein)
- 4<sup>th</sup> Romeo, ZS6ARQ – 87 points (West Rand)
- 5<sup>th</sup> Johan, ZS1A – 69 points (Boland)
- 6<sup>th</sup> Christi, ZS4CGR (Bo-Karoo) and Cliff, ZS6BJU (West Rand) – 67 points
- 8<sup>th</sup> Phillip, ZS6PVT – 65 points (West Rand)
- 9<sup>th</sup> Dawid, V51DK – 64 points (Bo-Karoo)
- 10<sup>th</sup> Pieter, ZS6XT – 63 points (Bo-Karoo)
- 11<sup>th</sup> Pieter, ZS3PG – 58 points (Bo-Karoo)
- 12<sup>th</sup> David, ZS1DDK – 55 points (Boland)
- 13<sup>th</sup> Johan, ZS6DC – 50 points (Bo-Karoo)
- 14<sup>th</sup> Woody, ZS3WL – 47 points (Bo-Karoo)
- 15<sup>th</sup> Adriaan, ZS1ADL – 46 points (Boland)
- 16<sup>th</sup> Jadranko, ZS6DJA – 45 points (West Rand)
- 17<sup>th</sup> Fritz, ZS1KFR (Bo-Karoo), Celso, ZS1MYG (Cape Town) and Andrew, ZS1AN (West Rand) – 44 points
- 20<sup>th</sup> David, ZS6ACC – 42 points (West Rand)
- 21<sup>st</sup> Anthony, ZS6ANT – 39 points (West Rand)
- 22<sup>nd</sup> Louis, ZS5LS – 38 points (Hibiscus)
- 23<sup>rd</sup> Marie, ZS4MG (Bo-Karoo), Wynand, ZS6WY and Vaughn, ZS6VLR (both West Rand) – 37 points

26<sup>th</sup> Charmaine, ZS5CVH (Bo-Karoo), Andre, ZS1AN and Karl, ZS1KC (both Boland) – 36 points  
 29<sup>th</sup> Trevor, ZS1TR (Boland), Karin, ZS6MMA and Glen, ZS6GGA (both West Rand) – 35 points  
 32<sup>nd</sup> Christian, ZS3CRB and Breanne, ZS5BZ (both Bo-Karoo) – 34 points  
 34<sup>th</sup> Sybrand, ZS1SJ – 32 points (Boland)  
 35<sup>th</sup> Andre, ZS1F – 31 points (Boland)  
 36<sup>th</sup> Rassie, ZS1YT – 28 points (Boland)  
 37<sup>th</sup> Christo, ZS1BOK – 24 points (Boland)  
 38<sup>th</sup> Casey, ZS1AAS – 23 points (Boland)  
 39<sup>th</sup> Pieter, ZS2OB (Bo-Karoo) and Con, ZS1ES (Boland) – 21 points  
 41<sup>st</sup> Juanita, ZS2OY (Bo-Karoo) and Brian, ZS5SB (Hibiscus) – 14 points  
 43<sup>rd</sup> Geoff, ZS6C and Nic, ZR6AEZ (both West Rand) – 13 points  
 45<sup>th</sup> Lenord, ZS1AM – 9 points (Boland)  
 46<sup>th</sup> Ean, ZS1PR, Carl, ZS1KM (both Boland) and Dennis, ZS4BS (Bloemfontein) – 7 points

After three legs of the Contest

1<sup>st</sup> the West Rand ARC – 1 395 points  
 2<sup>nd</sup> the Bo-Karoo ARC – 1 256 points  
 3<sup>rd</sup> the Boland ARC – 1 110 points  
 4<sup>th</sup> the Highway ARC – 362 points  
 5<sup>th</sup> the Bloemfontein ARC – 294 points  
 6<sup>th</sup> the Hibiscus Coast ARC – 284 points  
 7<sup>th</sup> the Midlands ARC – 161 points  
 8<sup>th</sup> the Cape Town ARC – 98 points  
 9<sup>th</sup> the Sandton ARC – 85 points  
 10<sup>th</sup> the Port Elizabeth ARS – 50 points  
 11<sup>th</sup> the Sandringham Scout Group – 44 points  
 12<sup>th</sup> the Secunda ARC – 32 points

The fourth leg of the SARL 80 m Club Sprint takes place on Wednesday 18 September 2019!

### **What to drink during a Contest?** (A wee dram!)

GearHungry.com published an updated list of the best energy beverages. Old-school testers use coffee to go the distance, but the younger demographic may prefer Monster Energy Drink Zero Ultra, which according to the article is, "Packed with ginseng for energy and far less carbonation than regular energy drinks..." [www.gearhungry.com/best-energy-drinks/](http://www.gearhungry.com/best-energy-drinks/).

### **N1MM Logger+ in another language**

Al, AB2ZY ([akozak@hourglass.com](mailto:akozak@hourglass.com)) is a new member of the *N1MM Logger+* development team who is focused on preparing the popular logging program to support other languages beyond English. He's seeking a "set of user volunteers to work with me to get this ready for general distribution." According to Al, this team will "consist both of people who are willing to do translation work and those who wish to test translated languages." An experimental version of *N1MM Logger+* will be built from the production code base at regular intervals and made available to volunteers for testing. If you send mail to Al expressing an interest, please also tell him which language you'd like to help with, and whether you'd like to help with translation, testing, or both. (via *N1MM Logger+* group)

Al, AB2ZY ([akozak@hourglass.com](mailto:akozak@hourglass.com)), is 'n nuwe lid van die N1MM Logger + ontwikkeling span wat hom toespits op die voorbereiding van die gewilde logboek program om ander tale te ondersteun, buiten Engels. Hy soek 'n stel gebruikers vrywilligers om saam met hom te werk om dit gereed te maak vir algemene verspreiding. Volgens Al sal hierdie span "bestaan uit mense wat bereid is om vertaalwerk te doen en diegene wat die vertaalde tale wil toets." 'n Eksperimentele weergawe van N1MM Logger

+ word met gereelde tussenposes uit die produksie kode basis gebou en beskikbaar gestel aan vrywilligers vir toetsing. As jy 'n e-pos aan Al stuur, vertel hom ook met watter taal jy wil help en of jy wil help met vertaling, toets of albei.

### **The N1MM Logger+ Spectrum Display**

Posted to the *N1MM Logger+* Facebook group: "N6XI made a presentation to Northern California Contest Club (NCCC) featuring the *N1MM Logger+* Spectrum Display. It covers why you would want to use a spectrum display and why it is better when it is integrated into the logging program. The link is to a PDF of his *PowerPoint* presentation."

<https://n1mmwp.hamdocs.com/n1mmwpfiles/Download/Additional%20Support%20Files/N6XI%20N1MM%2B%20Spectrum%20PowerPoint%20Presentation%20to%20NCCC.pdf?t=1560359098>

### **The GPS2Time program for FT2, FT4, FT6, FT8**

In the July 2019 PCARS Newsletter, Jim, AC8NT and JC, KC3JXQ, describe using the *GPS2Time* program to keep your computer's clock correct for FT8 and FT4 communications using an inexpensive GPS receiver connected via USB. <https://www.vk4adc.com/web/software-projects/55-vk4adc-utils>

According to the article, the software will "...sync your PC's clock at a period you set (say every 15 minutes). It will also provide an up to 10 character grid square, as well as latitude, longitude, and altitude." <http://www.portcars.org/wp/wp-content/uploads/2019/06/PCARS-July2019.pdf>

### **African DX**

*Contacts with stations on the African continent count towards the SARL's All Africa Award* ([www.sarl.org.za/public/awards/awards.asp](http://www.sarl.org.za/public/awards/awards.asp))



Morocco, CN. On 26 and 27 July and on 29 and 30 July, 5C1M will draw attention to the anniversary of the present king's coronation. QSL via RW6HS.

The Gambia, C5. Przemek, SP3PS will be active again as C5SP from The Gambia from 23 July to 5 August. He will operate SSB and FT8 on 20 to 6 metres. QSL via home call.

Somalia, 6O. Ken, LA7GIA, will once again return to Somalia and be active as 6O7O in September. His last activity was in January 2018 as 6O6O. He announced the following on his Web page (<https://www.la7gia.com/where-next>), "For a long time I have been planning where to go next. This time I decided to return to Somalia which I also activated in 2018. I really look forward to this trip! Planning a trip to Somalia involves many limitations and challenges wrt obtaining permissions, logistics, operation as well safety and security wise. I have obtained the license 6O7O and LoTW is already received by ARRL.

I have a better QTH than last time, this time also with more space for beverages to NA/EU and Asia. Everything is booked and in place like accommodation, flight, etc. I will be operating solo for exactly 14 days on all bands 160 – 10 m using mainly CW. If possible, also digital modes. If someone can send me an original Elecraft mic I might do some SSB as well... I will be using my upgraded Elecraft K3, 1 kW amplifier and various TX/RX antennas. 160 m: top loaded vertical; 80/40 m: full size verticals; 30, 17 and 12 m: dipole; 20, 15 and 10 m: My favourite 2 el Mosley beam; RX antennas: 200 – 230 m beverage to NA/EU and Asia; K9AY loop as backup; RemoteQTH.com equipment and controller.

QSL via M0OXO. Log will be uploaded to ClubLog. Donations are very much appreciated to PayPal ([kenneth@opskar.no](mailto:kenneth@opskar.no)). Anyone donating upfront will receive direct QSL and express LoTW! ADDED NOTE: Also check out Ken's FaceBook page at <https://www.facebook.com/L-A-7-G-I-A-DXpeditions-707222219710335>

### **African Islands**

IOTA Frequencies

CW: 28 040 24 920 21 040 18 098 14 040 10 114 7 030 3 530 kHz  
SSB: 28 560 28 460 24 950 21 260 18 128 14 260 7 055 3 760 kHz

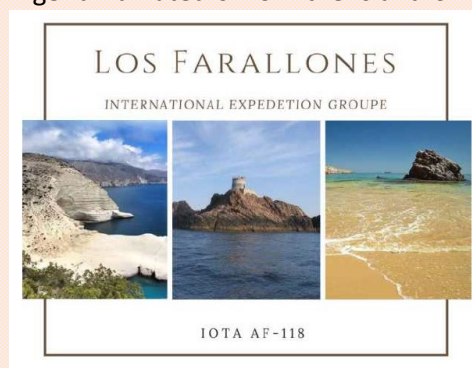
Cape Verde Islands, D4. Lukas, HB9EBT will be active from Sao Tiago (IOTA AF-005) Cape Verde between 22 and 29 July using CW on 40 to 10 m. QSL via HB9EBT, direct or via the bureau.



Italian Africa, IH9. Raf, IH9YMC is going to join the IOTA contest from Pantelleria Island (IOTA AF-018, WW Loc. JM56XT). QSL via eQSL.

Algeria, 7X. Ed, DL8CX will be active together with a group of Algerian amateurs from the island of Sridjina (IOTA AF-104, WW Loc. JM36KW) between 25 and 29 July with activity on 80 to 6 m using CW and SSB and including an entry in the IOTA contest. QSL via bureau, ClubLog OQRS.

Morocco, CN. Los Farallones (IOTA AF-118, WW Loc. IM85MK) will be activated by CN8QY, CN8CE, CN8HDZ, CN8PA, CN8RAH, IK2PZC, IZ7ATN, I8LWL, and MM0NDX between 25 and 30 July with three rigs and using the call sign 5C9A. QSL via I8LWL, ClubLog OQRS. <https://5c9a.com/>



### ITU Zone maps

Tim, EI8IC, created ITU Zone maps for the just past "IARU HF Championships." In the description on the website, he notes that "the purpose for defining these zones was to create a coarse grid for calculating HF coverage plots using propagation prediction programs of the day, the predecessors of what evolved to become VOACAP, etc." Furthermore, some boundaries intending to represent the borders of countries clearly do not. According to Tim, it appears for the purposes of radio contesting, the boundaries can be specified as whatever the contest sponsor deems appropriate! <http://www.mapability.com/ei8ic/maps/ituzone.php>

### Word to the Wise

**Polar Flutter** - An occasional property of radio signals that traverse the polar region, characterized by rapid changes or pulses of the amplitude of the signal. Its presence can indicate a polar path that is almost open or almost closed, but certainly changing. The rapidity of the flutter can make copying signals extremely difficult.

### Contest Calendar

This week's contests as compiled by Bruce Horn, WA7BNM. The period covered is 22 to 29 July 2019

Run for the Bacon QRP Contest  
01:00 - 03:00 UTC 22 July  
Geographic Focus: Worldwide  
Participation: Worldwide  
Mode: CW  
Bands: 160, 80, 40, 20, 15, 10 m  
Classes: Single Band; All Band  
Max power: 5 watts  
Exchange: RST, state, province or country and member no or power  
Work stations: Once per band

QSO Points: 1 point per QSO with non-member; 3 points per QSO with member on same continent; 5 points per QSO with member on different continent  
Multipliers: Each state, province, or country once; Multiply mults by 2 if >50 members worked  
Score Calculation: Total score = total QSO points x total mults  
Submit logs by: 28 July 2019  
E-mail logs to: (none)

Upload log at:

<http://qrpcontest.com/pigrun/autolog.php>

Mail logs to: (none)

Find rules at: <http://qrpcontest.com/pigrun/>

#### SKCC Sprint

00:00 - 02:00 UTC 24 July

Geographic Focus: Worldwide

Participation: Worldwide

Awards: Worldwide

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: (none)

Exchange: RST, state, province or country, name and SKCC no or power

Work stations: Once per band

QSO Points: (see rules)

Multipliers: Each state, province, or country once

Score Calculation: Total score = (total QSO points x total mults) and bonus points

Submit logs by: 23:59 UTC 26 July 2019

E-mail log summary to: (none)

Post log summary at:

[www.skccgroup.com/operating\\_activities/weekday\\_sprint/submit-display.php](http://www.skccgroup.com/operating_activities/weekday_sprint/submit-display.php)

Mail logs to: (none)

Find rules at:

[www.skccgroup.com/operating\\_activities/weekday\\_sprint/](http://www.skccgroup.com/operating_activities/weekday_sprint/)

#### Phone Fray

02:30 - 03:00 UTC 24 July

Geographic Focus: North America

Participation: Worldwide

Mode: SSB

Bands: 160, 80, 40, 20, 15 m

Classes: Single Op

Max power: 100 watts

Exchange: NA: Name and state, province or country; non-NA: Name

Work stations: Once per band

QSO Points: NA station: 1 point per QSO; non-NA station: 1 point per QSO with an NA station

Multipliers: Each US state (including KH6/KL7) once per band; Each VE province/territory once per band; Each North American country (except W/VE) once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 03:00 UTC 26 July 2019

E-mail logs to: (none)

Post log summary at: [www.3830scores.com](http://www.3830scores.com)

Mail logs to: (none)

Find rules at:

[www.perluma.com/Phone\\_Fray\\_Contest\\_Rules.pdf](http://www.perluma.com/Phone_Fray_Contest_Rules.pdf)

#### CWops Mini-CWT Test

13:00 - 14:00 UTC and 19:00 - 20:00 UTC 24 July and 03:00 - 04:00 UTC 25 July

Geographic Focus: Worldwide

Participation: Worldwide

Awards: Worldwide

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op (QRP/Low/High)

Max power: HP: >100 watts; LP: 100 watts;

QRP: 5 watts

Exchange: Member: Name and member no; non-Member: Name and state, province or country

Work stations: Once per band

QSO Points: 1 point per QSO

Multipliers: Each call once

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 04:00 UTC 27 July 2019

Post log summary at: [www.3830scores.com](http://www.3830scores.com)

Mail logs to: (none)

Find rules at: <https://cwops.org/cwops-tests/>

#### RSGB 80 m Club Championship, Data

19:00 - 20:30 UTC 25 July

Geographic Focus: United Kingdom

Participation: Worldwide

Awards: United Kingdom

Mode: RTTY, PSK

Bands: 80 m Only

Classes: (none)

Exchange: RST and serial no

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: (see rules)

Submit logs by: 23:59 UTC 26 July 2019

Upload log at: [www.rsgbcc.org/cgi-bin/hfenter.pl](http://www.rsgbcc.org/cgi-bin/hfenter.pl)

Mail logs to: (none)

Find rules at:

[www.rsgbcc.org/hf/rules/2019/r80\\_mcc.shtml](http://www.rsgbcc.org/hf/rules/2019/r80_mcc.shtml)



#### QRP Fox Hunt

01:00 - 02:30 UTC 26 July

Geographic Focus: United States

Participation: Worldwide

Mode: CW

Bands: 20 m Only

Classes: Single Op - fox or hound

Max power: 5 watts

Exchange: RST, state, province or country, name and power output

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO points

Submit logs by: 02:30 UTC 27 July 2019

E-mail logs to: (see rules)

Mail logs to: (none)

Find rules at:

[www.qrpfoxhunt.org/summer\\_rules.htm](http://www.qrpfoxhunt.org/summer_rules.htm)

#### NCCC RTTY Sprint

01:45 - 02:15 UTC 26 July

Geographic Focus: North America

Participation: Worldwide

Mode: RTTY

Bands: (see rules)

Classes: (none)

Exchange: Serial no, name and QTH

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 28 July 2019

E-mail logs to: (none)

Post log summary at: [www.3830scores.com/](http://www.3830scores.com/)

Mail logs to: (none)

Find rules at:

[www.ncccsprInternationalcom/rttyns.html](http://www.ncccsprInternationalcom/rttyns.html)

#### NCCC Sprint

02:30 - 03:00 UTC 26 July

Geographic Focus: North America

Participation: Worldwide

Mode: CW

Bands: (see rules)

Classes: (none)

Exchange: Serial no, name and QTH

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 28 July 2019

E-mail logs to: (none)

Post log summary at: [www.3830scores.com/](http://www.3830scores.com/)

Mail logs to: (none)

Find rules at:

[www.ncccsprInternationalcom/rules.html](http://www.ncccsprInternationalcom/rules.html)

#### RSGB IOTA Contest

12:00 UTC 27 July to 12:00 UTC 28 July

Geographic Focus: Worldwide

Participation: Worldwide

Mode: CW, SSB

Bands: 80, 40, 20, 15, 10 m

Classes: Single Op 12 hrs - Island Fixed, Island DXpedition or World - CW, SSB or mixed - QRP, low or high; Single Op 24 hrs - Island Fixed, Island DXpedition or World - CW, SSB or mixed - QRP, low or high; Single Op Assisted 12 hrs - Island Fixed, Island DXpedition or World - CW, SSB or mixed - QRP, low or high; Single Op Assisted 24 hrs - Island Fixed, Island DXpedition or World - CW, SSB or mixed - QRP, low or high; Multi-Single - Island Fixed/Island DXpedition - QRP, low or high; Multi-Two - Island Fixed; Island DXpedition - QRP, low or high

Max power: HP: 1 500 watts; LP: 100 watts;

QRP: 5 watts

Exchange: RS(T), serial no and IOTA No (if applicable)

Work stations: Once per band per mode

QSO Points: (see rules)

Multipliers: Each IOTA reference once per band per mode

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 2 August 2019

E-mail logs to: (none)

Upload log at: [www.rsgbcc.org/cgi-bin/hfenter.pl](http://www.rsgbcc.org/cgi-bin/hfenter.pl)

Mail logs to: (none)

Find rules at:

[www.rsgbcc.org/hf/rules/2019/riota.shtml](http://www.rsgbcc.org/hf/rules/2019/riota.shtml)

#### ARS Flight of the Bumblebees

17:00 - 21:00 UTC 28 July

Geographic Focus: North America  
 Participation: Worldwide  
 Mode: CW  
 Bands: 40, 20, 15, 10 m  
 Classes: Home-Based; Bumblebee  
 Max power: 5 Watts  
 Exchange: Home: RST, state, province or country and power; Bumblebee: RST, state, province or country and Bumblebee no  
 Work stations: Once per band  
 QSO Points: 1 point per QSO  
 Multipliers: (none)  
 Score Calculation: Total score = total QSO points x total Bumblebees x 3  
 Submit logs by: 11 August 2019  
 E-mail logs to: [ARSBumblebees@gmail.com](mailto:ARSBumblebees@gmail.com)  
 Mail logs to: (none)  
 Find rules at: [www.arsgrp.blogspot.com/](http://www.arsgrp.blogspot.com/)

#### QCX Challenge

13:00 - 14:00 UTC and 19:00 - 20:00 UTC 29 July and 03:00 - 04:00 UTC 30 July  
 Geographic Focus: Worldwide  
 Participation: Worldwide  
 Mode: CW  
 Bands: 160, 80, 40, 20, 15, 10 m  
 Classes: Single Op  
 Max power: HP: >5 watts; QRP: 5 watts  
 Exchange: RST, name, state, province or country and rig  
 Work stations: Once per band  
 QSO Points: 3 points per QSO with QCX station; 1 point per QSO with non-QCX station  
 Multipliers: (none)  
 Score Calculation: Total score = total QSO points  
 Submit logs by: 04:00 UTC 1 August 2019  
 Post log summary at: [www.3830scores.com](http://www.3830scores.com)  
 Mail logs to: (none)  
 Find rules at: [www.qrp-labs.com/party.html](http://www.qrp-labs.com/party.html)

### Operating Tip

**Change the Goal to Learn New Skills** - Try to learn and practicing *one new thing* each time you get on the air in a contest. Or, turn some real contests into "practice ones" by changing the goal from "winning the contest" to becoming proficient at a new technique. For example, it is usually faster to keep your hands on the keyboard to log contacts in a contest. Why not learn the keyboard equivalents of mouse movements and clicks, so you do not have to take your hands off the keyboard? Practice by putting the mouse where you cannot reach it during a contest. Sure, it will be frustrating at first, but practicing any new thing can be. *(CW is a skill – FT8 does not require skill!)*

### A new property of light

Light has been around for such a long time; you would think we would know everything about it. But, no - a new property of light was discovered recently: "self-torque." In the process of discovering this property, researchers also found a technique to modulate the orbital angular momentum of light, which could mean a new way to send information from point A to point B.  
<https://phys.org/news/2019-06-property.html>

### Next Week's Contests

QCX Challenge, 13:00 - 14:00 UTC and 19:00 - 20:00 UTC 29 July and 03:00 - 04:00 UTC 30 July  
 Phone Fray, 02:30 - 03:00 UTC 31 July  
 CWops Mini-CWT Test, 13:00 - 14:00 UTC and 19:00 - 20:00 UTC 31 July and 03:00 - 04:00 UTC 1 Aug  
 NRAU 10 m Activity Contest, 17:00 - 18:00 UTC (CW) and 18:00 - 19:00 UTC (SSB) and 19:00 - 20:00 UTC (FM) and 20:00 - 21:00 UTC 1 Aug (Dig)  
 SKCC Sprint Europe, 19:00 - 21:00 UTC 1 Aug  
 QRP Fox Hunt, 01:00 - 02:30 UTC 2 Aug  
 NCCC RTTY Sprint, 01:45 - 02:15 UTC 2 Aug  
 NCCC Sprint, 02:30 - 03:00 UTC 2 Aug  
 10-10 International Summer SSB Contest, 00:01 UTC 3 Aug to 23:59 UTC 4 Aug  
 European HF Championship, 12:00 - 23:59 UTC 3 Aug  
 North American CW QSO Party, 18:00 UTC 3 Aug to 05:59 UTC 4 Aug

SARL HF Phone Contest, 14:00 - 17:00 UTC 4 Aug  
ARS Spartan Sprint, 01:00 - 03:00 UTC 6 Aug

*Items used with acknowledgement to the ARRL Letter, the ARRL DX News, the ARRL Contest Update, OPDX Bulletin, 425 DX Bulletin, DXNL Newsletter, WIA-News, the RSGB News, DxCoffee, Southgate ARC News, DX World and the Amateur Radio Newsletter*